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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/630,407	08/01/2000	Takanobu Noguchi	Q60265	5925

7590

10/15/2002

Sughrue Mion Zinn Macpeak & Seas PLLC
2100 Pennsylvania Avenue NW
Washington, DC 20037-3213

EXAMINER

YAMNITZKY, MARIE ROSE

ART UNIT	PAPER NUMBER
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1774

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DATE MAILED: 10/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-9

Office Action Summary

Application No.

09/630,407

Applicant(s)

NOGUCHI ET AL.

Examiner

Marie R. Yamnitzky

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2002 and 31 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. This Office action is in response to applicants' amendment filed 07/15/02 which amends the specification and claims 1, 2 and 8-14.

This Office action is also in response to applicants' supplemental amendment filed 07/31/02 which further amends claims 1 and 2.

Claims 1-14 are pending.

2. Applicants' amendments overcome the objection to the disclosure for informalities, the objection to claims 8-14 as being improper multiple dependent claims, and the rejection of claims 1-7 under 35 U.S.C. 112, second paragraph.

3. Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the specific polymers set forth in the examples and for EL devices comprising these specific polymers and articles incorporating such EL devices, does not reasonably provide enablement for the full scope of polymers, EL device and articles incorporating EL devices encompassed by the present claims. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims for the reasons of record in Paper No. 4 in the rejection of claims 1-7 under 35 U.S.C. 112, first paragraph.

4. Applicants' arguments filed 07/15/02 have been fully considered but they are not persuasive with respect to the rejection under 35 U.S.C. 112, first paragraph.

Applicants point to Table 1 on page 66 of the specification and argue that the absorption edge wavelength of each homopolymer can be easily estimated from the character of the copolymer without actually preparing the individual homopolymers.

Based on applicants' arguments, it is the examiner's understanding that, with reference to a copolymer of units of formula (1) and formula (3) as required by claim 1, the absorption edge wavelength of the copolymer can be taken as approximating the absorption edge wavelength of a homopolymer of units of formula (1) and the fluorescence peak wavelength of the copolymer can be taken as approximating the absorption edge wavelength of a homopolymer of units of formula (3). (If the examiner's understanding of applicants' arguments is incorrect, clarification of the record is required.)

Applicants' arguments are not persuasive because, with reference to the data set forth in Table 1, the fluorescence peak of the copolymer is not the same as the absorption edge wavelength of the homopolymer of units of formula (3). It is also not clear from this one copolymer example whether the absorption edge wavelength of the copolymer will always be the same as the absorption edge wavelength of the homopolymer of units of formula (1). Condition (c) as set forth in claim 1 sets forth a relation between absorption edge wavelengths of two homopolymers that must be met. It is not clear that using values that are approximations of absorption edge wavelengths of homopolymers will necessarily result in an accurate determination as to whether a particular copolymer meets the claim limitations of condition (c). For example, if the absorption edge wavelength of polymeric fluorescent substance 4 (430 nm) prepared according to Example 2 in the present specification is used as λ_1 and the fluorescent

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peak wavelength of polymeric fluorescent substance 4 (426 nm) is used as λ_2 , then polymeric fluorescent substance 4 is not within the scope of the present claims because 1239/430 is not greater than or equal to 1239/426.05.

Even if using the absorption edge wavelength and fluorescent peak wavelength of a polymeric fluorescent substance consisting of repeating units of formulae (1) and (3) can be used to accurately determine whether the absorption peak wavelength of a polymer consisting of units of formula (1) and the absorption peak wavelength of a polymer consisting of units of formula (3) meet the relation set forth in (c) in claim 1, it is not clear how the absorption edge wavelength and fluorescent peak wavelength of a polymeric fluorescent substance comprising three repeating units as required by claim 2 can be used to determine whether the absorption edge wavelengths of three homopolymers meet the relation set forth in (f) in claim 2. At best, it would appear that one could estimate the absorption edge wavelengths for two of the three homopolymers.

5. The miscellaneous issues noted on page 5 of Paper No. 4 remain. No amendments have been made with respect to these issues and applicants' arguments did not specifically address any of these issues.

6. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (703) 308-4413. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax numbers for Art Unit 1774 are (703) 872-9311 for official after final faxes and (703) 872-9310 or (703) 305-5408 for all other official faxes. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (703) 872-9041.)

MRY
10/11/02



**MARIE YAMNITZKY
PRIMARY EXAMINER**

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